



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/070,042 | 07/18/2002 | Jorg Peter Schur | von Kreisler.022 | 9726 |

110 7590 01/21/2004

DANN, DORFMAN, HERRELL & SKILLMAN
1601 MARKET STREET
SUITE 2400
PHILADELPHIA, PA 19103-2307

EXAMINER

LEVY, NEIL S

ART UNIT PAPER NUMBER

1616

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| | | | |
|--------------------|-------------|-----------------------|---------------------|
| APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
|--------------------|-------------|-----------------------|---------------------|

| |
|----------|
| EXAMINER |
|----------|

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

DATE MAILED: 9

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 10/03/03
☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-48 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
☐ Claim(s) _____ is/are allowed.
☒ Claim(s) 1-48 is/are rejected.
☐ Claim(s) _____ is/are objected to.
☒ Claims 1-48 are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☒ received.
☐ received in Application No. (Series Code/Serial Number) _____
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
☐ Interview Summary, PTO-413
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152

- SEE OFFICE ACTION ON THE FOLLOWING PAGES -

Applicant's election without traverse of Group II, Spraying application to wood, with amendment so that species isopropyl alcohol of claim 44, tannic acid of claim 10-19, Benzyl alcohol of claim 20-43 are to be examined in Paper No. 10/03/03 is acknowledged.

However, specific species of 2 or more Gras agents were not selected; claim 1 is to Benzyl alcohol, while 5 is to propylene glycol, with second agent Tannic acid, while claim 20 is to Benzyl alcohol and propylene glycol while claim 7 is to propyl alcohol. Thus, we presume applicant considers all of these species combinations as equivalent.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not evident that Tannin and Tannic acid are GRAS; further, CAS shows them to be identical; please provide the GRAS list. Likewise with phenol (claim 15).

Claims 8, 17-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Treatment, at higher (185g/M², Example 3) concentrations than the general statement (P.26, 0.1-50g/M²) of preferred concentration, was required to control mold, but only with specified agent combination and ratio; but not of the claimed components,

Art Unit: 1616

rather; Lactic acid, propylene glycol and a phenolic essential oil were required, in addition to Benzyl alcohol and Tannin. Example 4A shows PPA 1 is ineffective at 50, Examples 4B, 4C do shows efficacy, but at higher ratio of tannin (claim 19) than is claimed. However, we do not know what the carrier used to spray was, nor do we know the mold, other than cheese associated. One in the art would not be able to determine whether any of the claimed components and combinations, within the guidelines of the specification, would be anti parasitic when sprayed on wood, or antimicrobial to other than cheese molds. The specifications guidelines are shown to be ineffective as mold control on wood, higher amounts/concentrations are required. These claims are beyond the scope of the specification. The multitude of claimed inventions, with out specific guidance as to combination of critical components ratios and amounts applied to protect against specific microbes requires more testing than one of ordinary skill in the art would be expected to perform in order to determine combinations which of any claimed composition; in fact protects against any of 640,000 or more insect parasite species, or worms, or molds, other than of cheese, when such composition is sprayed on wood.

The factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in *In re Wands*, 8 USPQ2d 1400 (Fed. Cir. 1988). Among these factor are: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction of guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary. When the above factors are

Art Unit: 1616

weighed, it is the examiner's position that instant disclosure fails to meet the enablement requirement for the following reasons;

(1) The nature of the invention: claims are to wood surface treated by spraying specific combinations of GRAS and phenol compounds, which are anti parasitic and antimicrobial. The invention is in fact sprayed compositions intended to protect wood.

(2) The state of the prior art use of these compounds for non-specific protection-experimentation was required.

(3) The relative skill of those in the art

The relative skill of those in the art is at the experiments level to determine Microbial and parasite species able to be protected against.

(4) The predictability or unpredictability of the art

The unpredictability of the art is very high.

(5) The breath of the claims

They are beyond attainment,

(6) The amount of direction or guidance presented. Standard protocols are used, but incompletely described.

(7) The presence or absence of working examples. Examples are present.

(8) The quantity of experimentation necessary: extensive.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1616

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-48 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Blum et al 6207290.

Blum treats wood (col. 1, first paragraph, col. 2 top) against Fungus and parasites as antifoulant for wood construction timber, and the like (col. 5, lines 1-27). Compositions include Benzyl alcohol and/or propylene glycol (col. 2, bottom) and Tannins and Tannic acid (col. 4, bottom) at 0.01-10%. Essential oils are also present phenyl alcohol (col. 2, bottom) benzaldehyde, Nonyl phenol (col. 3, top).

Solvents; Benzyl alcohol, are 28% (example 1). Propyl alcohol (isopropyl) col. 3, top) may also be utilized. Derivatives are not disclosed Ethyl alcohol is, as a homolog, obvious; as methanol and isopropyl alcohols are stated as unlimited examples (col. 2, Bottom, 3 top).

Acetoin also is seen as an obvious analog of the alcohol examples (col. 2, bottom, 3 top) gas are lactic, acetic, Valeric, capronic, adipic, acid, and analog of the citrates maleates, which in the water provide free acids (col. 4, bottom) and the cinnamic compounds – analogs, again of those specified antioxidant and UV protective compounds (col. 4, lines 29-45), or derivatives thereof – non critical of the instant invention – such as derivatives of PABA, dimethoxy and methoxy cinnamate, and benzo phenones. Phenyl propanol is last line, col. 2.

Art Unit: 1616

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blum et al 6,207,290 and Rodriguez in view of Kuwazuru et al 5665432 JP 07304609 and Bessette et al WO 98/54971

Blum (above) treats wood, with solvent alcohols, GRAS compounds, phenols and tannins. However, not every specific compound instantly claimed is specified by Blum – examples non-limiting, are seen as including these compounds as obvious homologs and analogs of the specified compounds.

Rodriguez also treats wood (lines 7-8, col. 1, col. 2 bottom, 3, top) and shows equivalence of methyl, ethyl, propyl and isopropyl alcohols (col. 3, lines 52-59) with tannin and Tannic acid, exemplified at col. 9, line 11-22.

Kuwazuru also treats wood (col. 1, bottom, 2 top) and also equates ethanol, propanol as useful alcohols, with glycerol, propylene glycol (col. 2, bottom). In order to provide fungicidal protection, Benzoic acid or phenols can be employed (col. 3, bottom), while JP shows Benzyl alcohol at 10% provides a safe wood preservative (abstract).

Thus, the artisan would find it obvious to prepare particular ingredient combinations, sizes, concentration and ratios of ingredients, depending upon the target species, desired number of applications, length of time for desired protection, ease of handling, degradation.

Art Unit: 1616

It has not clearly been established by objective showing of some additional unusual and/or unexpected results that the administration of the particular form of active, carrier of the particular form of structure to be treated, provides any greater level of prior art expectation as claimed. Further, applicant has showed no criticality as to the concentration or agent.

The selection of each ingredient and form thereof is a result effective parameter chosen to obtain the desired effects. It would be obvious to vary the nature of each ingredient to optimize the effects desired, and the use ingredients for the functionality for which they are known to be used is not a basis for patentability.

The combination of components as shown in general by Blum and delineated by Rodriguez is obvious as components to treat wood, of fording microbial, fungal, parasitic as taught by Kuwazuru and (JP) preservative.

Also, Bessette shows insect control with Benzyl alcohol and cinnamic alcohol, and analogs (claims 35-39) thus obvious to include in composition where insects are to be protected against.

One having ordinary skill in the art would be motivated to perform this modification in order to reduce toxicity to operator.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made, desiring to utilize wood compositions, to use one of those known in the art, as exemplified by the primary references, with selection of the equivalent agents of any of the referenced compounds, at concentrations effective to kill microbes but not the operator. The instant invention provides well known old art recognized compounds,

Art Unit: 1616

with well known art recognized effects, applied by well known art recognized methods to achieve control over pests as is well known in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil Levy whose telephone number is (571) 272-0619.

The examiner can normally be reached on Tuesday through Friday 7 AM to 5:30 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.



Levy/LR
January 14, 2004

NEIL S. LEVY
PRIMARY EXAMINER